

IN THE CLAIMS

Please amend the claims as follows:

1. (Once amended.) A semiconductor laser light emitting device comprising:
a stacked film composed of a stack of group III nitride semiconductor films each
containing at least one kind selected from aluminum, gallium, indium, and boron;
wherein,
an upper portion of said stacked film is formed into a ridge-like stripe, to form a current
injection region;
a current injection width W_{st} of said current injection region is at a value in a range of $1 \mu\text{m} \leq W_{st} \leq 3 \mu\text{m}$,
a current non-injection region formed on both sides of said ridge-like strip; and
at least part of said current non-injection region is made from a material expressed by a
chemical formula $\text{Al}_x\text{Ga}_{1-x}\text{N}$ ($0 \leq x \leq 1.0$); and
the component ratio "x" of Al is at a value in a range of $0.3 \leq x \leq 1.0$, so that said
semiconductor laser light emitting device is configured as an index guide type semiconductor
laser light emitting device; and

a film located between an active layer and the current non-injection region of the stacked
film made from a material expressed by a chemical formula $\text{Al}_x\text{Ga}_{1-x}\text{N}$ ($0.3 \leq x \leq 1.0$) and has a
thickness of $0.2 \mu\text{m}$ or less.

3. (Original) A semiconductor laser light emitting device according to claim 1,
wherein part, present between an active layer and said current non-injection region, of said
stacked film under said current non-injection region at least includes a film which is made from a

material expressed by a chemical formula $\text{Al}_x\text{Ga}_{1-x}\text{N}$ ($0.3 \leq x \leq 1.0$) and which has a thickness of $0.2 \mu\text{m}$ or less.

4. (Cancelled)

5. (Original) A semiconductor laser light emitting device according to claim 1, wherein a difference Δn between an effective refractive index n_1 of said current injection region in the film stacking direction and an effective refractive index n_2 of said current non-injection region in the film stacking direction is in a range of $0.007 \leq \Delta n = (n_1 - n_2) \leq 0.012$.

6. (Original) A semiconductor laser light emitting device according to claim 2, wherein a difference Δn between an effective refractive index n_1 of said current injection region in the film stacking direction and an effective refractive index n_2 of said current non-injection region in the film stacking direction is in a range of $0.007 \leq \Delta n = (n_1 - n_2) \leq 0.012$.

7. (Original) A semiconductor laser light emitting device according to claim 3, wherein a difference Δn between an effective refractive index n_1 of said current injection region in the film stacking direction and an effective refractive index n_2 of said current non-injection region in the film stacking direction is in a range of $0.007 \leq \Delta n = (n_1 - n_2) \leq 0.012$.

8. (Original) A semiconductor laser light emitting device according to claim 4, wherein a difference Δn between an effective refractive index n_1 of said current injection region

in the film stacking direction and an effective refractive index n_2 of said current non-injection region in the film stacking direction is in a range of $0.007 \leq \Delta n = (n_1 - n_2) \leq 0.012$.

9. (Currently Amended) A semiconductor laser light emitting device comprising:
a stacked film composed of a stack of group III nitride semiconductor films each containing at least one kind selected from aluminum, gallium, indium, and boron;

wherein,

 an upper portion of said stacked film is formed into a ridge-like stripe, to form a current injection region;

a current injection width W_{st} of said current injection region is at a value in a range of $1 \mu\text{m} \leq W_{st} \leq 3 \mu\text{m}$,

a current non-injection region formed on both sides of said ridge-like strip; and
at least part of said current non-injection region is made from a material expressed by a chemical formula $\text{Al}_x\text{Ga}_{1-x}\text{N}$ ($0 \leq x \leq 1.0$); and

the component ratio "x" of Al is at a value in a range of $0.15 < x < 0.30$,
so that said semiconductor laser light emitting device is configured as a weak index type pulsation semiconductor laser light emitting device; and

a film located between an active layer and the current non-injection region of the stacked film made from a material expressed by a chemical formula $\text{Al}_x\text{Ga}_{1-x}\text{N}$ ($0.15 \leq x \leq 0.30$) and has a thickness of $0.2 \mu\text{m}$ or less.

from cl. 11

Old notes new

11. (Original) A semiconductor laser light emitting device according to claim 9, wherein part, present between an active layer and said current non-injection region, of said stacked film under said current non-injection region at least includes a film which is made from a material expressed by a chemical formula $Al_xGa_{1-x}N$ ($0.15 \leq x \leq 0.30$) and which has a thickness of $0.2 \mu m$ or less.

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12. (Cancelled)

13. (Original) A semiconductor laser light emitting device according to claim 9, wherein a difference Δn between an effective refractive index $n1$ of said current injection region in the film stacking direction and an effective refractive index $n2$ of said current non-injection region in the film stacking direction is in a range of $0 < \Delta n = (n1 - n2) < 0.007$.

14. (Original) A semiconductor laser light emitting device according to claim 10, wherein a difference Δn between an effective refractive index $n1$ of said current injection region in the film stacking direction and an effective refractive index $n2$ of said current non-injection region in the film stacking direction is in a range of $0 < \Delta n = (n1 - n2) < 0.007$.

15. (Original) A semiconductor laser light emitting device according to claim 11, wherein a difference Δn between an effective refractive index $n1$ of said current injection region in the film stacking direction and an effective refractive index $n2$ of said current non-injection region in the film stacking direction is in a range of $0 < \Delta n = (n1 - n2) < 0.007$.

16. (Original) A semiconductor laser light emitting device according to claim 12, wherein a difference Δn between an effective refractive index n_1 of said current injection region in the film stacking direction and an effective refractive index n_2 of said current non-injection region in the film stacking direction is in a range of $0 < \Delta n = (n_1 - n_2) < 0.007$.

17. (Currently Amended) A semiconductor laser light emitting device comprising:
a stacked film composed of a stack of group III nitride semiconductor films each containing at least one kind selected from aluminum, gallium, indium, and boron;

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wherein,

an upper portion of said stacked film is formed into a ridge-like stripe, to form a current injection region;

a current injection width W_{st} of said current injection region is at a value in a range of $1 \mu\text{m} \leq W_{st} \leq 3 \mu\text{m}$,

a current non-injection region formed on both sides of said ridge-like strip; and
at least part of said current non-injection region is made from a material expressed by a chemical formula $\text{Al}_x\text{Ga}_{1-x}\text{N}$ ($0 \leq x \leq 1.0$); and

the component ratio “ x ” of Al is at a value in a range of $0 \leq x \leq 0.15$,

so that said semiconductor laser light emitting device is configured as a gain type laser light emitting device; and

a film located between an active layer and the current non-injection region of the stacked film made from a material expressed by a chemical formula $\text{Al}_x\text{Ga}_{1-x}\text{N}$ ($0 \leq x \leq 0.15$) and has a thickness of $0.2 \mu\text{m}$ or less.

from cl. 19

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19. (Original) A semiconductor laser light emitting device according to claim 17, wherein part, present between an active layer and said current non-injection region, of said stacked film under said current non-injection region at least includes a film which is made from a material expressed by a chemical formula $Al_xGa_{1-x}N$ ($0 \leq x \leq 0.15$) and which has a thickness of $0.2 \mu m$ or less.

20. (Cancelled)

21. (Original) A semiconductor laser light emitting device according to claim 17, wherein a difference Δn between an effective refractive index $n1$ of said current injection region in the film stacking direction and an effective refractive index $n2$ of said current non-injection region in the film stacking direction is in a range of $0 < \Delta n = (n1 - n2) < 0.007$.

22. (Original) A semiconductor laser light emitting device according to claim 18, wherein a difference Δn between an effective refractive index $n1$ of said current injection region in the film stacking direction and an effective refractive index $n2$ of said current non-injection region in the film stacking direction is in a range of $0 < \Delta n = (n1 - n2) < 0.007$.

23. (Original) A semiconductor laser light emitting device according to claim 19, wherein a difference Δn between an effective refractive index $n1$ of said current injection region in the film stacking direction and an effective refractive index $n2$ of said current non-injection region in the film stacking direction is in a range of $0 < \Delta n = (n1 - n2) < 0.007$.

24. (Original) A semiconductor laser light emitting device according to claim 20,
wherein a difference Δn between an effective refractive index n_1 of said current injection region
in the film stacking direction and an effective refractive index n_2 of said current non-injection
region in the film stacking direction is in a range of $0 < \Delta n = (n_1 - n_2) < 0.007$.

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